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IN REPLY  
REFER TO

DSCC-VAT

1 July 2004

MEMORANDUM FOR MILITARY/INDUSTRY DISTRIBUTION

SUBJECT: Initial Draft of MIL-PRF-8805 /11J, /14F, /15G, /17G, /18G, /19F, /23G, /25F, /34E, /38G, /40H, /47G, /48H, /49H, /65D, /76H, /84E, /90F, /96E, /100F, /101K, /104C, /107C, /110D, and /114C.  
Project numbers 5930-1838 through -1863.

The drafts of the above subject documents are being sent to you for review and comments. These drafts consist of the following changes:

Updating of referenced documents.  
Incorporation of amendments.

If these documents are of interest to you, please provide your comments electronically. This can be in the form of a return e-mail, with or without an attached text file. A 45-day coordination cycle from the date of this letter has been allotted. Please provide your comments within that time period. If no comments are received in the allotted 45 day coordination cycle, concurrence is assumed and all comments received after will be held to the first amendment. If an electronic response is not possible we will still accept comments via letter, facsimile or phone call but only after you have contacted the project officer listed below. The draft documents can be found at the following DSCC-VA web page:

[www.dsccl.dla.mil/Programs/MilSpec/initialdrafts.asp](http://www.dsccl.dla.mil/Programs/MilSpec/initialdrafts.asp)

This process still requires military departments to identify their comments as "Essential" or "Suggested". Essential comments must be justified with supporting data. Military review activities should forward comments to their custodians or this office, as applicable, in sufficient time to allow for consolidating the department reply.

If there are any questions, please contact Mark Rush by the preferred method of E-Mail at [Mark.Rush@dlm.mil](mailto:Mark.Rush@dlm.mil) or by telephone at commercial 614-692-0550, DSN 850-0550; or by facsimile at 614-693-1644. Our mailing address as a last resort is Defense Supply Center, Columbus, DSCC-VAT, P.O. Box 3990, Columbus, OH 43216-5000. If you have further questions or concerns you may contact me at [Kendall.Cottongim@dlm.mil](mailto:Kendall.Cottongim@dlm.mil), by telephone at 614-692-0676 or by facsimile at 614-692-6939.

/ SIGNED /  
KENDALL A. COTTONGIM  
Chief  
Electronics Components Team



NOTE: This draft, dated June 15, 2004 prepared by DLA-CC,  
has not been approved and is subject to modification.  
DO NOT USE PRIOR TO APPROVAL.  
(Project 5930-1856)

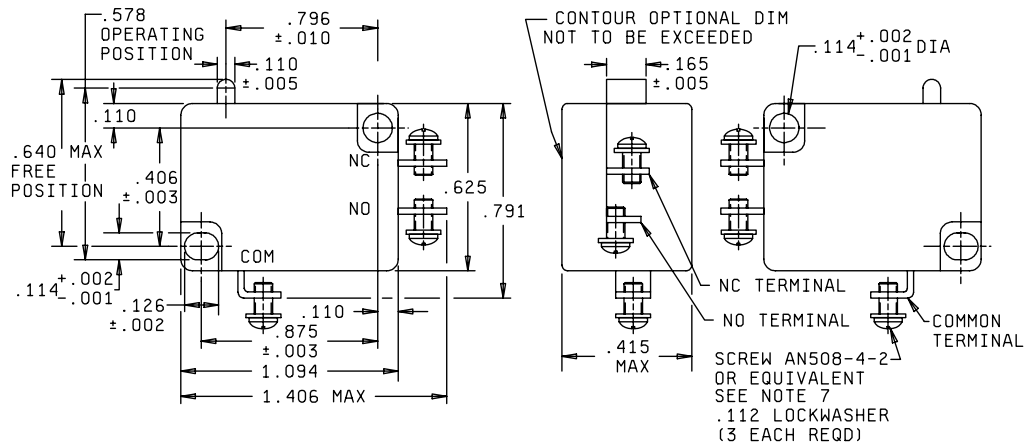
INCH-POUND  
MIL-PRF-8805/90F  
DRAFT  
SUPERSEDING  
MIL-PRF-8805/90E  
3 September 1999

## PERFORMANCE SPECIFICATION SHEET

### SWITCH, SENSITIVE, LOW FORCE, SPDT, 10 AMPERES, UNSEALED

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The complete requirements for acquiring the switches described herein shall consist of this specification and the latest issue of MIL-PRF-8805.



Inches	mm	Inches	mm	Inches	mm	Inches	mm
.001	0.03	.110	2.79	.415	10.54	.796	20.22
.002	0.05	.114	2.90	.578	14.68	.875	22.23
.003	0.08	.126	3.20	.625	15.88	1.094	27.79
.005	0.13	.165	4.19	.640	16.26	1.406	35.71
.010	0.25	.406	10.31	.791	20.09		

#### NOTES:

- Dimensions are in inches.
- Unless otherwise specified, tolerance is  $\pm 0.015$  inch (0.38 mm).
- Exact shape of switch optional provided dimensions specified are not exceeded.
- Mark, stamp, or mold NO, NC, and COM. terminal designation on either side of switch.
- Metric equivalents are given for general information only.
- Mounting holes shall accept .112 (2.82 mm) maximum diameter pins or screws.
- Alternative base metals and protective finishes, as approved by the qualifying activity, may be utilized for terminal screws and lock washer material. Dimensions shall be in accordance with the referenced hardware specifications.

FIGURE 1. Configuration and dimensions.

REQUIREMENTS:

Dimensions and configurations: See figure 1.

Enclosure design: 1 (unsealed).

Temperature characteristic: 1 (-55°C to +85°C).

Shock: 50 g's, MIL-STD-202, method 213, test condition A.

Vibration grade: 1 (10 Hz to 500 Hz).

Weight: 0.30 ounce maximum.

Terminal strength: 15 pounds.

Operating characteristics:

Actuating force: 2.65 ounces maximum.

Pre travel: .050 inch (1.27 mm) maximum.

Movement differential: .010 inch (0.25 mm) maximum.

Overtravel: .050 inch (1.27 mm) minimum.

Strength of actuating means: 25 pounds.

Contact resistance: Not applicable.

Dielectric withstanding voltage:

Sea level: 1,000 V rms.

Altitude: 400 V rms at 50,000 feet.

Mechanical endurance: 25,000 cycles.

Electrical endurance: 25,000 cycles.

Electrical ratings: See table I.

Qualification:

Group submission – See table II.

Part or Identifying Number (PIN): See table III.

MIL-PRF-8805/90F

TABLE I. Electrical ratings.

Load	Sea level		50,000 feet	
	28 V dc (amperes)	115 V ac, 60 Hz (amperes)	28 V dc (amperes)	115 V ac, 60 Hz (amperes)
Resistive	10	10	10	10
Inductive	6	10	6	10
Motor	6	3	---	---

TABLE II. Group submission.

Examination or test	Basic switch	Other switch samples	Extent of approval
Qualification inspection table of MIL-PRF-8805, groups I through VIII, inclusive	M8805/90-001 (all sample units)	M8805/90-002 and M8805/90-003 (2 sample units each) visual and mechanical examination	All

TABLE III. PIN's and characteristics.

PIN's M8805/90	Terminals	Switching characteristics
-001	NC, NO and Common	SPDT
-002	NO and Common	SPNO
-003	NC and Common	SPNC

Marginal notations are not used in this revision to identify changes with respect to the previous issue.

Referenced Documents:

Mil-PRF-8805  
MIL-STD-202  
AN508

Custodian:  
Navy - EC  
DLA - CC

Preparing activity:  
DLA - CC

(Project 5930-1856)

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at [www.dodssp.daps.mil](http://www.dodssp.daps.mil).